

Sub-A

1. A method for displaying picture frames using single field data in interlaced encoded image data having a two-field structure, comprising the steps of:
- performing inverse quantization of the interlaced encoded image data to obtain DCT (Discrete Cosine Transform) coefficients of each of field blocks;
- 5 selecting one of two fields forming each picture frame;
- adding zero values after the DCT coefficients of each of field block in the selected field in order to obtain compensated DCT coefficients having a data size corresponding to one frame block; and
- performing inverse DCT of the compensated DCT coefficients to obtain image data for each frame block.
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2. The method for displaying picture frames according to claim 1, further comprising the step of:
- determining frames for which to perform motion compensative prediction; and
- performing the motion compensative prediction of the image data
- 5 corresponding to the frames to be compensated.
3. A method for displaying picture frames using MPEG-2 (Moving Picture Experts Group 2) encoded image data obtained from NTSC (National Television System Committee) television signals, comprising the steps of:
- performing inverse quantization of the interlaced encoded image data to obtain
- 5 DCT (discrete cosine transform) coefficients for each field block;
- alternatively selecting one of odd and even fields forming each picture frame at

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could

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data for each frame block.

comprising the step of:

determining frames for which to perform motion compensative prediction; and

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encoded image data having a two-field structure, comprising:

the encoded image data:

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a selecting device for selecting one of two fields forming each picture frame;

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an inverse DCT processing device for performing inverse DCT of the

compensated DCT coefficients to obtain pixel data for each frame block; and

a frame data buffer for temporally storing the pixel data of the frame blocks.

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6. The apparatus for displaying picture frames according to claim 5, further comprising a device for determining frames for which to perform motion compensative prediction, and a device for performing the motion compensative prediction of the pixel data corresponding to the frames to be compensated.

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7. The apparatus for displaying picture frames according to claim 5, further comprising a storage device for storing the encoded image data to be displayed and a display device for displaying the pixel data.

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